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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,644	02/28/2002	Allan M. Schrock	005127.00197	6973
22909	7590	02/20/2004	EXAMINER	
BANNER & WITCOFF, LTD. 1001 G STREET, N.W. WASHINGTON, DC 20001-4597			LINDINGER, MICHAEL L	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/086,644	Applicant(s) SCHROCK ET AL.	
	Examiner Michael L. Lindinger	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 9, 15, 30, and 44 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9, 15, 30, and 44 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the Applicant does not include claim language that suggests how the pace calculation system can be applied to a personal digital assistant, nor is the phrase "providing the calculated pace to another device" defined. The Examiner does not know if there are infrared or radio wave transmissions between devices, thereby transmitting the calculated pace data from one device to another. Additionally, the practice of transferring acquired data from a wristwatch to a computer or PDA is well known in the art and is not in itself a patentable limitation as is clearly shown in the 103(a) rejection.

Claim R jections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-8, 10-14, 16-29, 31-43, and 45-51 are rejected under as being unpatentable by Thinesen U.S. Patent No. 5,050,141 in view of Kanzaki U.S. Patent No. 5,526,290. Regarding Claims 1, 4, 12-14, 16-29, 31-43, and 45-51, Thinesen teaches a device 1 and methods for calculating a pace, comprising, a chronograph (CHRONO mode) for measuring an elapsed time, a distance memory 5 containing a distance, and a pace calculation process (PACE mode), wherein the device further including a data memory 5 for storing the calculated pace (Col. 3, lines 25-65; Col. 4, lines 1+; Col. 5, lines 1+: FIG. 1). In the Thinesen reference, the programmable microprocessor (integrated circuit) possesses ROM and RAM in order to store all acquired and programmed data in the device (Col. 3, lines 60+). Thinesen teaches a method of obtaining distance to be traveled that can be calculated by multiplying the present elapsed time (FIG. 4) by the currently stored pace in steps per minute (FIG. 5), operator's stride length, and a conversion factor of 1 mile/5280 feet (FIG. 4), currently stored pace were 135 steps per minute (FIG. 5), and length of operator stride

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were 3.5 feet per step, (FIG. 5), the program would calculate the distance to be traveled as 2.2372 miles (FIG. 4) (Col. 6, lines 59+; Col. 7, lines 1+, Thus, for example, if elapsed time were 25 minutes That is, $25 \text{ minutes} \times 135 \text{ steps/minute} \times 3.5 \text{ feet/step} \times 1 \text{ mile}/5280 \text{ feet}$ is equal to 2.2372 miles when rounded to the nearest ten-thousandths). Thinesen also teaches a LAP/SPLIT mode for acquiring numerous time and pace values. Thinesen does not explicitly teach a device or method comprising a pace calculation process, which calculates a pace by dividing an inputted distance in a distance memory by the elapsed time provided by the chronograph. Kanzaki teaches a pace calculation device where the pace is calculated by dividing a distance by an elapsed time (Col. 1, lines 1+), wherein the device can calculate a plurality of pace times drawn from inputting a plurality of target times and distances (FIG. 2). It would have been obvious to a person skilled in the art at the time of the invention to adapt the Thinesen with a pace calculating method utilizing the steps of inputting the distance and dividing that value by an elapsed time value. The Applicant's assertion in the Specification that user's calculate pace times using calculators or doing the calculations by hand after a workout because there are no devices that calculate a pace value instantaneously after a workout are false. As shown in the rejections and in the below cited Prior Art, it is well known to utilize distances, splits, and elapsed time in order to calculate an average pace time. In regards to the instant application, the method of inputting a specific value over another value in order to calculate another value is an obvious step in the art.

Regarding Claims 2-3, Thinesen teaches a device further comprising chronometer (not explicitly numbered, however, the wristwatch provides a count of the hours, minutes, and seconds during a 12 or 24 hour time period, resetting itself to 1:00:00 at the end of each period) and a display 15 which displays the calculated pace (Col. 1, lines 25-65; Col. 4, lines 1+; FIG. 1).

Regarding Claims 5, Thinesen teaches a device, wherein the input device includes at least one depressable button S1-7 (Col. 3, lines 25+; FIG. 1).

Regarding Claim 6, Thinesen teaches a device, wherein the input device includes a first depressable button S4 for selecting a data field, a second depressable button S1/S6 for incrementing a value in a selected data field, and a third depressable button S2/S5 for decrementing the value in the selected data field (Col. 5, lines 19-40).

Regarding Claim 7, wherein the chronograph is implemented using a mechanical structure (not explicitly numbered, Col. 4, lines 55+; Col. 5, lines 1+ are directed towards mechanical counters).

Regarding Claim 8, Thinesen teaches a device further including an optical encoder (not explicitly numbered, display 15 is described as an electroptric

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display, (Col. 4, lines 55+) for converting an elapsed time measured by the chronograph into a digital format.

Regarding Claims 10-11, Thinesen teaches a device, wherein the chronograph, the distance memory, and the pace calculation process are incorporated into a watch, wherein the watch is a wristwatch 1 (Col. 3, line 26; FIG. 1).

2. Claims 9, 15, 30, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thinesen U.S. Patent No. 5,050,141 in view of Kanzaki U.S. Patent No. 5,526,290 in further view of Fishman U.S. Patent No. 5,771,399. The Thinesen/Kanzaki combination teaches a device 1 for calculating a pace, comprising, a chronograph (CHRONO mode) for measuring an elapsed time, a distance memory 5 containing a distance, and a pace calculation process (PACE mode) which calculates a pace by dividing the distance contained in the distance memory by an elapsed time provided by the chronograph, wherein the device further including a data memory 5 for storing the calculated pace, as well as the corresponding methods as noted in the above rejections. The Thinesen/Kanzaki combination does not explicitly teach a device wherein the chronograph, the distance memory, and the pace calculation process are incorporated into a personal digital assistant, and further prompting and providing the calculated pace to another device. Fishman teaches a wristwatch 104 comprising a receiver and a transmitter (240 bi-directional transfers) for transferring data and information to an external device 102, wherein the external device is a computer

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or personal digital assistant (Col. 7, lines 5+). It would have been obvious to a person skilled in the art at the time of the invention to adapt the Thinesen/Kanzaki combination to include means to "incorporate" the pace calculation system to a personal digital assistant, as well as means to provide the calculated pace to another device. In the instant case, as stated in the 112 2nd paragraph rejection, the Applicant provides no structural relationship defining how the claimed pace calculation device can be implemented into a PDA other than stating that fact in itself. As also stated in the 112 2nd paragraph rejection, the practice of transferring acquired data from a wristwatch to a computer or PDA is well known in the art and is not in itself a patentable limitation. Therefore, providing means to achieve data transfer between devices to the Thinesen reference is an obvious step in the art.

Prior Art

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Searcy U.S. Patent No. 4,220,996 discloses a jogger's computational device comprising means to calculate a jogger's running pace.
- Morokawa U.S. Patent No. 4,337,529 discloses a pace timing wristwatch comprising a plurality of buttons, pace calculating means, and audible tone bursts signifying achievement of a time goal.
- Ono et al. U.S. Patent No. 4,962,469 discloses an exercise measurement instrument comprising a mode selection function between a walking mode, an exercise-walking mode, and a jogging mode.
- Ohira et al. U.S. Patent No. 5,297,110 discloses a stopwatch with a target time function comprising a lap measurement time circuit.
- Suga U.S. Patent No. 5,301,154 discloses a time calculating device comprising a display register, a time register, a running distance register, and means to calculate a running pace.
- Morohoshi U.S. Patent No. 6,219,303 discloses an electronic device with clock function, time correction function, and a recording medium.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael L. Lindinger whose telephone number is (572) 272-2106. The examiner can normally be reached on Monday-Thursday (7:30-6).

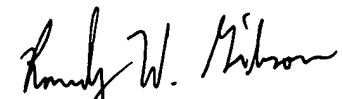
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (572) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael L. Lindinger
Examiner
Art Unit 2841

February 17, 2004
MLL



RANDY W. GIBSON
PRIMARY EXAMINER